



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

TECH CENTER 1600/2900

JAN 29 2002

RECEIVED

Applicants: Anthony et al.

Serial No.: 09/973,853

Case No.: 20757Y

Art Unit:

1614

Filed: October 10, 2001

Examiner:

To Be Assigned

For: Aza- and Polyaza-Napthalenyl Carboxamides Useful as
HIV Integrase Inhibitors

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants also wish to bring the following co-pending PCT applications designating the U.S. to the Examiner's attention.

BC Case 20758Y PCT - Appl'n No. PCT/US01/31550, filed 10/09/01 Anthony et al. WO 02/30426
BC Case 20759Y PCT - Appl'n No. PCT/US01/42565, filed 10/09/01 Anthony et al. WO 02/55079
BC Case 20760Y PCT - Appl'n No. PCT/US01/42553, filed 10/09/01 Zhuang et al. WO 02/36734

Copies of these applications are enclosed herewith. Applicants hereby request that Examiner consider the above-listed co-pending cases, initial beside each to indicate that the co-pending applications have, in fact, been considered, and return a copy of the initialed page to Applicants.

Respectfully submitted,

By:

Kenneth R. Walton
Kenneth R. Walton, Reg. No. 32,951
Attorney for Applicants

MERCK & CO., Inc.
P.O. Box 2000
Rahway, New Jersey 07065-0907
Tel.: (732) 594-3462

Date: January 11, 2002

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet PATENT 1 of 2

COMPLETE IF KNOWN

Application Number	09/973,853
Filing Date	October 10, 2000
First Named Inventor	Anthony et al.
Group Art Unit	1624
Examiner Name	Coleman
Attorney Docket Number	20757Y

JAN 31 2002
TECH CENTER 1600/2900

RECEIVED

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Brenda Coleman

Date Considered:

Oct. 29, 2003

Application Number	09/973,853
Filing Date	October 10, 2001
First Named Inventor	Anthony et al.
Group Art Unit	1614 1624
Examiner Name	Coleman
Attorney Docket Number	20757Y

Sheet 2 of 2

RECEIVED
FEB 15 2002
TECH CENTER 1600/2900

[illegible]

**Examiner
Signature**

Brenda Coleman

Date Considered

Oct. 29, 2003

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

STATEMENT BY APPLICANT

FEB 11 2002

(use as many sheets as necessary)

Sheet 1 of 2

COMPLETE IF KNOWN

Application Number	09/973,853
Filing Date	October 10, 2001
First Named Inventor	Anthony et al.
Group Art Unit	1614 1624
Examiner Name	Coleman
Attorney Docket Number	20757Y

RECEIVED,
FEB 15 2002
TECH CENTER 160012800

[illegible][illegible]

Examiner
Signature

Bogdan Polansky

Date _____

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

2

of

2

Attorney Docket Number

20757Y

COMPLETE IF KNOWN

Application Number

09/973,853

Filing Date

October 10, 2000

First Named Inventor

Anthony et al.

Group Art Unit

1624

Examiner Name

Coleman

RECEIVED
JAN 31 2002
TECH CENTER 1600/2900

OTHER NON PATENT LITERATURE DOCUMENTS

Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.

Examiner Initials*	Cite No.	
BC	A	L. Ratner et al., "Complete Nucleotide sequence of the AIDS virus, HTLV-III", Nature, Vol. 313, pp. 277-284 (January 24, 1985)
BC	B	H. Toh et al., "Close structural resemblance between putative polymerase of a Drosophila transposable genetic element 17.6 and pol gene product of Moloney murine leukaemia virus", The EMBO Journal, Vol. 4, No. 5, pp. 1267-1272 (1985)
BC	C	M. D. Power et al., "Nucleotide Sequence of SRV-1, Type D Simian Acquired Immune Deficiency Syndrome Retrovirus", Science, Vol. 231, pp. 1567-1572 (1986)
BC	D	L. H. Pearl et al., "A structural model for the retroviral proteases", Nature, Vol. 329, pp. 351-354 (September 24, 1987)
BC	E	Derwent Abstract No. 97-048296/05 (Abstract of JP 08301849-A, Takeda Chem. Ind. Ltd., "New heterocyclic carboxamide derivs. - useful in pharmaceuticals as tachykinin receptor inhibitors"), 1996
BC	F	Chemical Abstracts No. 33-2525 ; (Abstract of Otiai et al., "Synthesis of 2,5 naphthyridine derivatives. II", J. Pharm. Soc. Japan, Vol. 58, pp. 764-770 (1938))

RECEIVED
JUN 12 2002
TECH CENTER 1600/2900

Examiner Signature

Brenda Coleman

Date Considered

Oct. 29, 2003

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Substitute for form 1449A/PTO			COMPLETE IF KNOWN		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	09/973,853	
			Filing Date	October 10, 2001	
			First Named Inventor	Neville J. Anthony, et al.	
			Sup Art Unit	1624	
			Examiner Name	For. Assigned Coleman	
Sheet	1	of	1	Attorney Docket Number	20757Y

[illegible][illegible]

Examiner Signature	Brenda Coleman	Date Considered	Oct. 29, 2003
-----------------------	----------------	--------------------	---------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.
Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.

开

(use as many sheets as necessary)

COMPLETE IF KNOWN

Application Number	09/973,853
Filing Date	October 10, 2001
First Named Inventor	Neville J. Anthony, et al.
Group Art Unit	1614-1624
Examiner Name	Not Yet Assigned C
Attorney Docket Number	20757Y

Sheet 1 of 2

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Brenda Coleman

Date Considered

Oct. 29, 2003

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609

Draw line through citation if not in conformance and not considered

Include copy of this form with next communication to applicant.

Computer generated form "IDS Form" (IDS Folder), Merck & Co., Inc. 10/05/2001

(use as many sheets as necessary)

COMPLETE IF KNOWN

Application Number	09/973,853
Filing Date	October 10, 2001
First Named Inventor	Neville J. Anthony, et al.
Group Art Unit	1614 1624
Examiner Name	Not Yet Assigned Co
Attorney Docket Number	20757Y

Sheet 2 of 2

[illegible]

Oct. 29, 2003

Computer generated form "IDS Form" (IDS Folder), Merck & Co., Inc. 10/05/2001

A circular stamp from the Intellectual Property Office (IPO). The text "IPO" is at the top, "APR 28 2003" is in the center, and "INTELLECTUAL PROPERTY OFFICE" is at the bottom. A handwritten signature is visible across the center.[illegible][illegible]

Oct. 29, 2003

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED
JUL 21 2003
TECH CENTER 1800/2800
eman

Computer generated form "IDS Form" (IDS Folder), Merck & Co., Inc., 06/27/2003



EXHIBIT 2

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

AUG 12 2003

TECH CENTER 1600/2

JAN 8 2002

BARBARA RE

Applicants: Anthony et al.

Serial No.: 09/973,853

Case No.: 20757Y

Art Unit:
1614

Filed: October 10, 2001

Examiner:
To Be AssignedFor: Aza- and Polyaza-Napthalenyl Carboxamides Useful as
HIV Integrase InhibitorsAssistant Commissioner for Patents
Washington, D.C. 20231INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants also wish to bring the following co-pending PCT applications designating the U.S. to the Examiner's attention.

~~Case 20758Y PCT - App'n No. PCT/US01/31550, filed 10/09/01 - Anthony et al.~~~~Case 20759Y PCT - App'n No. PCT/US01/42565, filed 10/09/01 - Anthony et al.~~~~Case 20760Y PCT - App'n No. PCT/US01/42555, filed 10/09/01 - Zhuang et al.~~

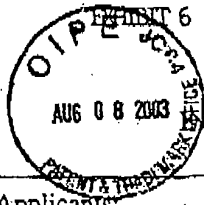
Copies of these applications are enclosed herewith. Applicants hereby request that Examiner consider the above-listed co-pending cases, initial beside each to indicate that the co-pending applications have, in fact, been considered, and return a copy of the initialed page to Applicants.

Respectfully submitted,

By:

Kenneth R. Walton, Reg. No. 32,951
Attorney for ApplicantsMERCK & CO., Inc.
P.O. Box 2000
Rahway, New Jersey 07065-0907
Tel.: (732) 594-3462

Date: January 11, 2002



PATENT

RECEIVED

AUG 12 2003

TECH CENTER 1000/2003

12 of 12

Applicants: Anthony et al.

Serial No.: 09/973,853 Case No.: 20757Y

Filed: October 10, 2001

For: AZA- AND POLYAZA-NAPHTHALENYL
CARBOXAMIDES USEFUL AS INTEGRASE
INHIBITORS

Art Unit: ROCKETED

1614

FEB 12 2003

Examiner: LONI SCHNEPISI

Not Yet Assigned

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants wish to bring the following co-pending applications to the Examiner's attention.

BC Case 20949Y PCT Serial No. PCT/US 02/25666; Int'l Filing Date -- 13 Aug 2002 Merck & Co., Inc.

BC Case 20950Y PCT Serial No. PCT/US 02/27151; Int'l Filing Date -- 13 Aug 2002 Merck & Co., Inc.

BC Case 20951Y Serial No. 10/218,537, filed 14 Aug 2002 Anthony et al.

Applicants hereby request that Examiner consider the above-listed co-pending cases, initial beside each to indicate that the co-pending applications have, in fact, been considered, and return a copy of the initialed page to Applicants. Enclosed are copies of these applications as originally filed.

EXPRESS MAIL CERTIFICATE
DATE OF DEPOSIT February 12, 2003
EXPRESS MAIL NO. EL 920762522 US
I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS
BEING DEPOSITED WITH THE UNITED STATES POSTAL
SERVICE AS EXPRESS MAIL, "POST OFFICE TO
ADDRESSEE" BEFORE 5 P.M. ON THE ABOVE DATE IN
AN ENVELOPE ADDRESSED TO ASSISTANT COMMISSIONER
FOR PATENTS, WASHINGTON, D.C. 20231
MAILED BY *[Signature]*
DATE 2-12-03

Respectfully submitted,

By:

Kenneth R. Walton
Kenneth R. Walton, Reg. No. 32,951
Attorney for Applicants
MERCK & CO., Inc.
P.O. Box 2000
Rahway, New Jersey 07065-0907
Tel.: (732) 594-3462

Date: February 12, 2003

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

STATEMENT BY APPLICANT

AUG 08 2003

(Use as many sheets as necessary)

COMPLETE IF KNOWN

Application Number 09/973,853

Filing Date	October 10, 2000
--------------------	------------------

First Named Inventor	Anthony et al.
----------------------	----------------

Group Art Unit	1624
----------------	------

Examiner Name	Coleman
---------------	---------

Attorney Docket Number 20757Y

Sheet 2 of 12

OTHER NON PATENT LITERATURE DOCUMENTS

[illegible]

**Examiner
Signature**

Brenda Coleman

Date Considered

Oct. 29, 2003

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant.

(use ~~as~~ many sheets as necessary)

Sheet **3** of 12

Application Number	09/973,853
Filing Date	October 10, 2001
First Named Inventor	Anthony et al.
Group Art Unit	1614 1624
Examiner Name	Coleman
Attorney Docket Number	20757Y

RECEIVED

AUG 12 2003

TECH CENTER 1600/2900

[illegible]

sub
class
300

[illegible]

**Examiner
Signature**

Brenda Coleman

Date Considered

Oct. 29, 2003

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant.

(use as many sheets as necessary)

Attorney Docket Number 20757Y

12


Attorney Docket Number 20757Y

Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.

BC A CAPLUS Accession No. 2001:923611, Kiyama et al., "Dual divalent metal ion chelators as HIV integrase inhibitors", abstract of WO 01/95905, Assignee: Shionogi & Co., Ltd. (2001)

Oct. 29, 2003

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.
Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.

Substituted for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (use only when necessary)			COMPLETE IF KNOWN		
			Application Number	09/973,853	
			Filing Date	October 10, 2001	
			First Named Inventor	Neville J. Anthony, et al	
			Group Art Unit	1614 1624	
			Examiner Name	To Be Assigned Coleman	
Sheet	5	of	12	Attorney Docket Number	20757Y

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature	Brenda Coleman	Date Considered	Oct. 29, 2003
-----------------------	----------------	--------------------	---------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant.

APPLICANT

AUG 08 2003

OFFICE

NECESSARY)

PATENT & TRADEMARK

[illegible]

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.
Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.

Substitute for form 1449A/PTD

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

COMPLETELY KNOWN

Application Number 09/973,853

Filing Date	October 10, 2001
--------------------	------------------

First Named Inventor Neville J. Anthony, et al.

Group Art Unit	1614 1624
----------------	----------------------

Examiner Name ~~Not Yet Assigned~~ C. Ieman

Attorney Docket Number 20757Y

Sheet

7

of

OTHER NON PATENT LITERATURE DOCUMENTS

**Examiner
Initials***

Cite
No.

Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.

Be

2.

Abstract of WO 02/070486 from <http://ipdl.wipo.int> (Fuji et al., "Nitrogen-Containing Heteroaryl Compounds Having HIV Integrase Inhibitory Activity", Assignee: Shionogi & Co., Ltd.), 2002

BC

3.

L. Chan et al., "Discovery of 1,6-Naphthyridines as a Novel Class of Potent and Selective Human Cytomegalovirus Inhibitors", *J. Med. Chem.*, Vol. 42, No. 16, pp. 3023-3025 (1999)

Bl

4.

Derwent Abstract No. 2002-732783, M. Fuji, "New Nitrogenous Heteroaromatic Compounds Are HIV Integrase Inhibitors For Treating HIV Infections, AIDS and AIDS-related Diseases", Abstract of WO 02/070491, Assignee: Shionogi & Co., Ltd. (2002)

**Examiner
Signature**

Brenda Coleman

Date Considered

Oct. 29, 2003

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant.

